Maryland

Science and Engineering Profile

Characteristic	State	U.S.	Rank	Characteristic	State	U.S.	Rank
Doctoral scientists, 1999[1]	21,510	518,670	6	Total R&D performance, 1998 (millions)	$8,019	$214,668	10
Doctoral engineers, 1999[1]	3,440	107,100	10	Industry R&D, 1998 (millions)	$1,744	$163,480	21
S&E doctorates awarded, 1999[1]	687	25,953	11	Academic R&D, 1998 (millions)	$1,318	$25,342	6
of which, in life sciences	28%	25%		of which, in life sciences	42%	57%	
in engineering	20%	21%		in engineering	22%	16%	
in social sciences	20%	16%		in physical sciences	14%	9%	
S&E postdoctorates, 1998[1]				Public higher education current-fund			
in doctorate-granting institutions	1,483	39,494	7	expenditures, 1997 (millions)	$2,353	$125,236	18
S&E graduate students, 1998[1]				Number of SBIR awards, 1990-98	1,759	35,413	4
in doctorate-granting institutions	9,644	422,834	13	Patents issued to state residents, 1999	1,510	83,901	17
Population, 1999 (thousands)	5,172	276,580	19	Gross state product, 1998 (billions)	$165	$8,800	16
Civilian labor force, 1999 (thousands)	2,766	140,536	19	of which, agriculture	1%	1%	
				manufacturing, mining, construction	14%	22%	
Personal income per capita, 1999	$32,465	$28,542	6	transportation, communication, utilities	8%	9%	
				wholesale and retail trade	15%	16%	
Federal spending				finance, insurance, real estate	21%	19%	
Total expenditures, 1999 (millions)	$41,990	$1,508,933	10	services	24%	21%	
R&D obligations, 1998 (millions)	$7,964	$70,445	2	government	18%	12%	

NOTE: Rankings and totals are based on data for the 50 States, District of Columbia, and Puerto Rico. Reliability of the estimates of industry R&D and of doctoral scientists and engineers varies by State, because the sample allocation was not based on geography. The rankings do not take into account the margin of error of estimates from sample surveys.

[1]Data on graduate students, doctoral scientists and engineers, and postdoctorates include all graduate degree (except M.D.) candidates and recipients in S&E fields, including health fields. Data on S&E doctorates awarded do not include health fields.

Federal Obligations for Research and Development by Agency and Performer: Fiscal Year 1998

	Performer							
Agency	Total	Federal Intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank, total
	[In thousands of dollars]							
Total, all agencies	7,964,210	4,766,005	163,223	2,054,921	798,113	178,769	3,179	2
Department of Agriculture	138,061	130,095	0	206	7,738	22	0	2
Department of Commerce	348,425	333,109	0	7,723	7,593	0	0	1
Department of Defense	2,715,895	1,505,114	0	993,688	205,981	11,031	81	5
Department of Energy	58,127	27,684	0	10,387	11,099	8,957	0	18
Dept. of Health & Human Services	3,233,290	2,370,500	163,223	266,992	380,322	51,323	930	1
Department of the Interior	12,348	11,811	0	80	432	0	25	12
Department of Transportation	24,572	3,249	0	13,145	6,519	0	1,659	5
Environmental Protection Agency	8,056	0	0	3,029	4,742	125	160	18
National Aeronautics and Space Admin	1,364,748	381,677	0	754,560	131,214	96,973	324	3
National Science Foundation	60,688	2,766	0	5,111	42,473	10,338	0	12
State rank, total	2	1	9	6	5	4	29	na

NOTE: Federal R&D obligations are as reported by funding agencies. Ranks and totals are based on data for the 50 States, District of Columbia, and Puerto Rico.

KEY: FFRDC = federally funded research and development center; SBIR = small business innovation research; na = not applicable.

SOURCES: Prepared by the National Science Foundation/Division of Science Resources Studies. Data compiled from numerous sources -- see the section, "Data Sources for Science and Engineering (S&E) State Profiles".